

REMARKS

These Remarks are responsive to the Final Office Action¹ mailed on April 5, 2005.

Claims 1-14, 18-21, 24-40, 44-47, and 50-52 were presented for examination and were rejected. Claims 1 and 27 are independent claims and are amended. No new matter is added; the current amendments are supported by the application as filed. Claims 2 and 28 are canceled. No claims are added. Claims 1, 3-14, 18-21, 24-27, 29-40, 44-47 and 50-52 are pending.

These Remarks are also responsive to the telephonic interview conducted with the Examiner on July 19, 2005. Applicant wishes to express its appreciation to the Examiner for his time and for providing Applicant with guidance on clarifying aspects of the claims and how best to illustrate the differences between Applicant's invention and the prior art of record.

In particular, Applicant has amended independent claims 1 and 27 to make even more clear that, although the "related documents" which are to be found may, in fact, be static, purely text-based documents, the underlying "temporal documents" are not, thus further distinguishing over any art relating to searches (whether weighted or not) of static, purely text-based documents.

Applicant has also amended independent claims 1 and 27 to make even more clear that the search for related documents is initiated by the receipt of a signal (e.g., via click of a mouse button) which is indicative of interest at a particular time during the temporal document.

¹ The Office Action may contain a number of statements characterizing the cited reference(s) and/or the claims which Applicant(s) may not expressly identify herein. Regardless of whether or not any such statement is identified herein, Applicant(s) does not automatically subscribe to, or acquiesce in, any such statement. Further, silence with regard to rejection of a dependent claim, when such claim depends, directly or indirectly, from an independent claim which Applicant(s) deems allowable for reasons provided herein, is not acquiescence to such rejection of that dependent claim, but is recognition by Applicant(s) that such previously lodged rejection is moot based on remarks and/or amendments presented herein relative to that independent claim.

Finally, Applicant has amended independent claims 1 and 27 to make clear that different portions of the selected text (e.g. closed-captioned text) are associated with different times within the underlying temporal document. This is consistent with the notion, of weighting terms within the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs.

Applicant does not believe such amendments to claims 1 and 27 substantively alter the scope of such claims but, rather, further illustrate the differences between Applicant's invention and the prior art.

With regard to the Final Action, paragraphs 4-6: The Examiner rejected:

(1) claims 1-7, 18-19, 27-33, and 44-45 under 35 U.S.C. §103(a) as being unpatentable over Wistendahl et al. (U.S. Patent No. 5,708,845), in view of Bi et al. (U.S. Patent No. 6,311,178 B1) and Giddings (U.S. Patent No. 4,845,697);

(2) claims 8-14 and 34-40 under 35 U.S.C. § 103(a) as being unpatentable over Wistendahl et al., Bi et al., and Giddings and further in view of Logan et al. (U.S. Patent No. 6,199,076 B1); and

(3) claims 20-21, 24-25, 46-47, and 50-51 under 35 U.S.C. 103(a) as being unpatentable over Wistendahl et al., Bi et al., and Giddings and further in view of Yeomans (U.S. Patent No. 6,182,065 B1).

Applicant respectfully traverses these rejections for the following reasons:

1. The Examiner admits that Wistendahl et al. does not disclose the invention because that reference does "not teach (c) weighting each term in the selected text by a function $W(t)$ according to the time at which the term occurs relative to the time at which the signal of interest

occurs and (d) finding the related documents by use of information retrieval techniques as applied to the weighted terms, and Applicant agrees.

2. The Examiner alleges that Bi and Giddings, which if combined with Wistendahl et al., discloses Applicant's claims 1 and 27. Applicant respectfully disagrees for the following reasons:

(a) Firstly, the combination of Bi and/or Giddings with Wistendahl et al., does not disclose at least element (c) of Applicant's claims 1 and 27, because that element is not disclosed by either Bi or Giddings.

Applicant's independent claims 1 and 27 are directed to finding documents which relate to a portion of a temporal document. The application recognizes that "a user may not be able to instantaneously think about the changing material [in a temporal document] that is being presented, make a decision that he is interested, and give the required signal. Moreover, it is understood that ... the decision may be based upon a sequence of material presented over a period of time, rather than based upon the material at a particular instant." Therefore, "it is assumed that there is a delay between the material of interest first being presented to the user, and the indication of interest, and it is further assumed that the user is interested in material which extends over a period of time." Thus, "it is assumed that the interest of the user in the content of the temporal document may be expressed as a function $W(t)$ of the time t prior to the signal indicating interest being given." (application, page 11 lines 1-14). Accordingly, independent claims 1 and 27 recite, among other things, selecting text associated with a portion of the temporal document, and *weighting each term in the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs.*

Nowhere in either Bi et al. or Giddings is there any teaching of *weighting each term according to the time t at which the term occurs relative to the time at which the signal of interest occurs*. The Office Action on page 3 recognizes that Bi et al. only teach weighting search terms to query a database. Examiner cites to col. 2, lines 38-48, which states: "It is preferred that in the computer matching system of the present invention, said requirement includes multiple elements as search criteria, each of said elements is assigned a weight of importance thereby each matching result has a search score indicating satisfaction level of said user . . ." However, Bi's weights of importance : (a) are assigned by the user based solely on user preference (col. 11, lines 31-32; col. 12, lines 64-67); and (b) have nothing to do with *the time t at which the term occurs relative to the time at which the signal of interest occurs*. Completely absent from Bi is any notion of the use of a "function $W(t)$ " to assign weights to particular terms.

Bi et al. provide an example of the assignment of weights they employ: "As an example, a user specifies that he is looking for a pair of tennis shoes with a price below \$100 and color is either 'white' or 'Blue', but also specifies that the color is very important *by giving a weight of 80 out of 100 to the color*. The system, while evaluating the criteria, accepts any white or blue tennis shoes as a partial match and those below \$100 as a full match." (col. 13, lines 3-9). Thus, as recognized by the Examiner, Bi et al. only teach weighting search terms to query a database and do not teach *weighting each term according to the time t at which the term occurs relative to the time at which the signal of interest occurs*.

Examiner's comments on page 11 of the Final Action as to Bi teaching weighting each term in the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs are respectfully traversed. The final

Office Action merely concludes, without any supporting citation, that “[t]he search engine is responsive to the time the user submits the request.” There is nothing in Bi to suggest that any terms of any selected text are weighted “according to the time *t* at which the term occurs relative to the time at which the signal of interest occurs.”

Giddings also fails to provide such teaching. Rather, Giddings is directed to searching for a CD track frame number, where the search occurs for a predetermined length of time, or a “time-out” period, before proceeding with a different search. Giddings teaches that upon failure to find a selected frame in a *predetermined length of time*, the search mechanism would try to find an adjacent frame with the same kind of back and forth searching motion for a *second predetermined length of time*.” (Giddings, col. 5 lines 27-53, emphasis added). For example, as shown in Giddings in FIG. 6, the system of Giddings tries to find a CD track T_0 for 4.25 seconds, and upon failure to find that CD track, searches for track T_0+1 for 1.5 seconds, and then track T_0+2 for another 1.5 seconds. (Giddings, FIG. 6; col. 15 line 47 - col. 16 line 23). With reference to Applicants’ independent claims 1 and 27, the “terms” in Giddings can be equated to the individual track numbers T_0 , T_0+1 , T_0+2 , etc. Giddings’ subsequent search thereof for a *predetermined length of time* or time-out, however, is not the same as Applicant’s *weighting each term according to the time *t* at which the term occurs relative to the time at which a signal of interest occurs*, as claimed in Applicants’ independent claims 1 and 27.

Further, Giddings performs a search for an adjacent track based on inherent relationships in the tracks’ numerical ordering, e.g., the *track numbering system* between track T_0 and higher *numbered* tracks T_0+1 , T_0+2 , etc. Giddings thus does not teach searching for track T_0+1 because it occurs at a particular time *relative to* a signal of interest, as claimed in Applicants’ independent claims 1 and 27, but rather, Giddings searches because of the numerical relationship. Applicant

thus concludes that Giddings does not provide any teaching of *weighting each term in the selected text according to the time t at which the term occurs relative to the time at which a signal of interest occurs.*

Examiner's comments on page 11 of the Final Action as to Giddings are also unsupported. Without any citation – indeed, without even making the same sort of unsupported statement about Giddings as was made about Bi – Examiner concludes that “Bi in combination with Giddings does teach and suggest weighting each term in the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs.” Again, there is no such teaching in Giddings.

Since neither Bi, nor Giddings, discloses at least element (c) of Applicant's claims 1 and 27, the combination of Bi and/or Giddings with Wistendahl et al. cannot show element (c) of Applicant's claims 1 and 27.

(b) Secondly, even if the combination of Bi and/or Giddings with Wistendahl did show element (c) of Applicant's claims 1 and 27 (which it does not), the combination of Wistendahl et al. with any reference purportedly showing element (c) of Applicant's claims 1 and 27 is simply not sensible.

In order to disclose the notion of “weighting each term in the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs” (element (c) of Applicant's claims 1 and 27), at least the following must occur: (1) there must be “selected text;” and (2) a set of weights must be generated by a function $W(t)$ for each term in the selected text, based on the time “ t ” at which each such term occurs, relative to the time at which the signal of interest occurs.

As just one example of many, if a signal of interest were received by Applicant's invention at a particular point within a television news program, and the closed-captioning for the previous 10 seconds consisted of the text "Hurricane season is here! Be prepared with weather updates and severe weather coverage on your mobile phone.", the following terms may have occurred at the following times relative to the time of receipt of the signal: "hurricane": $t = 10$ (i.e. 10 seconds before receipt of the signal); "season": $t = 9$; "weather": $t = 7$ and $t = 5$; "mobile": $t = 2$; and "phone": $t = 1$ (or "mobile phone": $t = 2$). Since it may be unclear exactly which of these specific terms precipitated the generation of the "signal of interest," all (or some sub-set) of the terms could be searched. However, the results of the search would be influenced by the weighting of the individual terms, based on the function $W(t)$.

In stark contrast, although "selected text" may be identified in Wistendahl et al. in response to the selection of any given "hot-spot," the notion of a "time t " at which the each term in the selected text "occurs relative to the time at which the signal of interest occurs" simply has no meaning. For example, Wistendahl et al, at col. 7, lines 55-59, discloses "displaying pop-up movie trivia about the stars Humphrey Bogart, Sidney Greenstreet, and Peter Lorre or objects such as the Maltese Falcon whenever the user clicks on these 'hot spots' appearing in different scenes in the film." In the first place, there is no question about what exactly precipitated the generation of any "signal of interest" – it was the appearance of the Maltese Falcon (since the user has to click on the particular "hot spot"). Thus, no attempt to weight any terms in the corresponding movie trivia (the "selected text") is even necessary. Moreover, since the "selected" text had not even occurred in the underlying temporal document at the time of the generation of the "signal of interest," there is simply no meaning to a "time t " at which any given term within the selected text "occurs relative to the time at which the signal of interest occurs."

As Examiner knows, and based at least on MPEP 2143, a prima facie case of obviousness under 35 U.S.C. 103(a) requires (1) a suggestion or motivation in the references themselves or generally known in the art, to combine the references, (2) a reasonable expectation of success to combine, and (3) a teaching, via the combination, of all the claimed limitations. *In re Vaeck*, 947 F. 2d. 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant notes that regardless of the final Office Action's failure to satisfy all elements of the claimed combination, one of ordinary skill in the art would *not* find it obvious to modify Wistendahl et al. based on Bi et al. and Giddings. First, such references are from disparate areas of art, with Wistendahl et al. directed to selections of media, while Bi et al. is directed to database searching, and Giddings is directed to searching for CD (compact disk) tracks. Second, one of ordinary skill simply would not modify a system such as Wistendahl et al., which relies on spatial discrimination of features, to derive a temporal system such as that claimed by Applicants in independent claims 1 and 27.

Applicant also notes, in view of the above, the notion of combining Wistendahl et al. with any reference which purportedly shows "weighting each term in the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs" (Applicant's element (c) of claim 1), just makes no sense. There would be, in fact, NO expectation of success with that combination. One skilled in the art reading Wistendahl would appreciate that fact and would, therefore, not be motivated to even review Bi and Giddings and vice versa.

Accordingly, Applicant respectfully submits that the final Office Action fails to satisfy all three elements of the prima facie showing of obviousness required for a rejection based on 35 U.S.C. 103(a). Applicant thus traverses the rejection of independent claims 1 and 27, and for

this reason, consider independent claims 1 and 27 to be allowable. Claims 3-14, 18-21, and 24-26 depend upon allowable independent claim 1, and claims 29-40, 44-47, and 50-52 depend upon allowable independent claim 27, and thus, claims 3-14, 18-21, 24-26, 29-40, 44-47, and 50-52 are also allowable for depending upon an allowable base claim.

With regard to the Final Action, paragraph 7: Applicants note with appreciation the Examiner's finding that claims 26 and 52 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

With regard to the Final Action, paragraph 8: Many of Examiner's comments have already been addressed on previous pages of the Amendment and Applicant therefore does not repeat them herein.


Conclusion

Reconsideration and allowance of claims 1-14, 18-21, 24-40, 44-47, and 50-52 are respectfully requested in view of the above remarks. If there are any remaining issues or the Examiner believes that a telephone conversation with Applicants' attorney would be helpful in expediting the prosecution of this application, the Examiner is invited to call the undersigned at (212) 395-8099.

Date: August 5, 2005

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